Reflex epilepsies: progress in understanding

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This book collects contributions giving an exhaustive overview of the ideas and data discussed at the 12th International Bethel-Cleveland Epilepsy Symposium on reflex epilepsies held in Biefeld, Germany, in June 2001. As the Editors state in the introduction, the title of the work highlights the authors’ intention to bring new knowledge to the nosography and mechanisms of the different forms of reflex epilepsies and, parallelly, through such knowledge, to better understand epilepsy itself. The book contains 14 chapters written by 36 distinguished epileptologists from around the world. The first three chapters are devoted to photosensitivity, offering a comprehensive review of experimental, neurophysiological and clinical aspects of photosensitive seizures and including the suggestion of innovative non-pharmacological methods to prevent photosensitivity by means of optical filters.

The question whether the induction of seizures by ideation, calculation, playing games, writing, or drawing have the same reflex epileptic mechanism of seizures provoked by thinking is discussed in depth and new insights on functional imaging in seizures provoked by reading, and the link between primary reading epilepsy and idiopathic generalised epilepsy are pointed out in the following chapters.

Thereafter, the book considers the neurophysiology of musical perception in musicogenic epilepsy and the complexity of emotional factors able to precipitate epileptic seizures. Three chapters are devoted to seizures provoked by hot water and by eating, discussing the not yet clarified effective neurophysiological mechanism. Finally, the last chapters of the book deal with seizures provoked by proprioceptive stimuli, in particular discussing the role played in this condition by cortical malformations.

Overall, the book represents a complete update on reflex epilepsies and opens interesting suggestions in the pathophysiology of generalized epilepsies as opposed to focal conditions. The text is easy to read, and the figures, particularly the polygraphic tracings, are clear and impressive.

This is the third book on reflex epilepsies in the epileptic literature panorama and appears six years after the previous volume. Advances in complex technologies for investigating epileptic seizures and the experience of the authors in this field are the hallmarks of this work.

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